

WHAT IS CLAIMED IS:

1. A stain-proofing agent comprising a polymer which contains at least one repeating unit (A1) having at least two hydroxyl groups and, if necessary, contains a  
5 repeating unit (B1) other than the repeating unit (A1), wherein the content (by mass) of the repeating unit (A1) is more than 10%.
2. The stain-proofing agent according to Claim 1, wherein at least one type of the repeating unit (B1) is a  
10 repeating unit (b1) having a crosslinkable functional group.
3. The stain-proofing agent according to Claim 1, wherein the octane removal work calculated from the contact angle of octane in water, of a coating film  
15 formed from the stain-proofing agent, is less than  $3.0 \times 10^{-2} \text{ J/m}^2$ .
4. A coating composition comprising a coating resin and the stain-proofing agent as defined in Claim 1.
5. The coating composition according to Claim 4, wherein  
20 the coating resin is a fluororesin.
6. The coating composition according to Claim 4, which further contains a crosslinking agent capable of crosslinking the stain-proofing agent.
7. A coated article having a coating film formed by  
25 using the coating composition as defined in Claim 4.
8. A stain-proofing agent comprising a polymer which contains at least two repeating units (A2) having

hydroxymethyl groups and, if necessary, contains a repeating unit (B2) other than the repeating units (A2), wherein the content (by mass) of the repeating units (A2) is more than 30%.

5 9. The stain-proofing agent according to Claim 8, wherein at least one type of the repeating unit (B2) is a repeating unit (b1) having a crosslinkable functional group.

10 10. The stain-proofing agent according to Claim 8, wherein the hydroxymethyl groups in the repeating units (A2) are bonded to nitrogen atoms.

11. The stain-proofing agent according to Claim 8, wherein the repeating units (A2) are repeating units obtained from at least one monomer selected from the group consisting of N-hydroxymethylacrylamide, N-hydroxymethylmethacrylamide, N,N-bis(hydroxymethyl)acrylamide and N,N-bis(hydroxymethyl)methacrylamide.

20 12. The stain-proofing agent according to Claim 8, wherein the octane removal work calculated from the contact angle of octane in water, of a film formed from the stain-proofing agent, is less than  $3.0 \times 10^{-2}$  J/m<sup>2</sup>.

13. A coating composition comprising a coating resin and the stain-proofing agent as defined in Claim 8.

25 14. The coating composition according to Claim 13, wherein the coating resin is a fluororesin.

15. The coating composition according to Claim 13, which

further contains a crosslinking agent capable of crosslinking the stain-proofing agent.

16. A coated article having a coating film formed by using the coating composition as defined in Claim 13.